Food and Agriculture Supplement

to Rocky Mountain Institute's
Economic Renewal Guide

If your community's efforts to develop a more sustainable local economy are focused primarily on food and agriculture, please use the attached factor summaries to replace those on pages 142 through 148 of the *Economic Renewal Guide*. Also, to set the stage for your work, please make available for your community participants, the final eight attached pages *Local Agriculture in the Global Economy* and *Local Agricultural Success Stories*.

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Natural Resources & Production Inputs

Farmland, clean water, appropriate equipment, and the availability of food processing supplies are among the natural resources and production inputs needed to support an agricultural economy and supply local food demand. They are also the places where new cost-saving farming practices can be tried and where local supply of some formerly imported inputs can generate new income for a town's economy. Taking stock of the supplies you need and the condition of the resources you work with is the first step to using your land and materials most efficiently and producing food economically.

Whatever you produce, you use what is at hand or what you can apply to the natural conditions around you. You need different sorts of supplies and resources to get the results you want. Even if you're a gardener, you need a hoe and a good plot of soil to start. You need such supplies as jars, spices, and a stove or freezer if you preserve your food. Market gardeners need vehicles to haul their produce to restaurants or farmers' markets.

There are any number of input combinations that adapt tools and natural resources to meet your production needs. The best combinations are those that keep your costs down and preserve your materials for future work. In order to make a living, you make the best possible use of the inputs you have. Efficiency and resourcefulness are the practices that keep soil fertile and put old barns to new uses. Efficient and resourceful communities make the most of what they have in order to stand on solid economic ground.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- How many farms operate in your area?
- What are farms in your area like (size, practices)?
- What do local farmers produce?
- What happens to locally produced food?
- How much land in your county is cultivated? Who owns it?
- Do many local farms irrigate? What is their water source?
- How far is the nearest town or city of 50,000 people or more? Does this town obtain raw materials from your community?
- Do local growers have easy access to production inputs (fertilizers, machinery, fuel, facilities for canning)?
- Is there a supply of excess heat in your area to warm water for fish farming or to heat greenhouses?
- Are there enough agricultural suppliers and service centers located near your town?
- What inputs do growers and processors import from outside of town?
- How much trading and repairing of equipment takes place locally in comparison with new purchases? What effect does re-use have on local farmers' bottom lines?
- Are alternative agricultural inputs readily available (manure, municipal compost, and waste-treatment sludge)?
- Are any synthetic or organic agricultural inputs produced locally?
- What do local people produce for themselves that might be mass produced and marketed? Do they use some material or practice that is unique to your area?
- What changes in production practices and facilities do growers

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and processors need in order to make and sell food products that the community imports?

- What pressures, if any, are there to take land out of agricultural production? How have land prices changed in the last 20 years?

Note: You'll probably identify many assets, problems and needs that are not reflected in these questions.

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Human & Organizational Resources

Everyone knows about old-fashioned barnraising, when all hands in the community put up a new barn in a day. It was an event for all; and each person knew that when their turn came, all the neighbors would show up for their barnraising, too. The spirit that raises barns includes an appreciation for the skills of everyone who shows up to work. Young or old, experienced or not, everyone is welcome. That same spirit is essential for creative and motivated economic renewal.

Most development efforts focus on the skills and energy of specialists, officials, and traditional leaders. Their contribution to the community is certainly necessary but it's not the only important human resource. Churches, schools, and civic clubs have facilities and volunteers for town projects; seniors, students, and artists offer an array of skills and ideas that increase and enhance a community's options. Their perspectives are useful to any economic development effort. Their skills and grassroots view of the town are vital resources for innovative projects.

Think about how combining your community's abundant skills and talents can cut the production time, cost, and risk of new ventures. You don't have to hire a special crew; you and your neighbors can raise your community's barn.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- What proportion of your town's population earns its income from the food and agriculture sectors of the local economy (grocery employees, implement dealers, farmers, processors)?
- Do any local residents have experience or expertise in such areas as integrated pest management, marketing, organic gardening, composting, or computer programming?
- What farming skills exist in your town? Who has them? How are the skills being passed on to others?
- What food processing skills exist in your town? Who has them? How are the skills being passed on to others?
- Do local grocers and human service organizations participate in food gleaning programs for low-income residents?
- Is there a Meals-on-Wheels program, Food Bank, or community garden in your community? Who participates?
- Can food and agriculture businesses find skilled employees?
- What off-farm jobs are available locally? How do they influence family farming?
- Do local schools play a role in encouraging potential entrepreneurs, supporting newly formed enterprises, or training workers?
- Are training opportunities for food production and marketing available at community colleges?
- Do local schools or other institutions offer their facilities for economic uses (canning, farmers' markets, labeling)?
- How accessible is the local Cooperative Extension Office? How do local farmers, processors, individuals use it?
- What roles do 4-H, FFA, and Junior Achievement play in your town?
- Do other community programs exist to teach gardening, food preserving, and general nutrition?
- Are women and minorities encouraged to start up and own their own businesses?
- Do local people volunteer for various projects? How active are civic

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groups and churches? Do they work together?

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Government

Big or small, government is ours. Local government sets the policies, programs, penalties, and priorities that allocate some of the community's resources and manage some of its activities. Government can encourage enterprise with enabling laws, promote innovation with education and technical assistance, and support initiative with revenue and other resources. To do this efficiently, effectively, and equitably, government needs public participation. It needs your knowledge of the community. Zoning laws, commercial regulations, public expenditures, taxation, and other governmental policies should reflect the needs, resources, and trends of the local economy.

For instance, some governmental regulations prohibit the use of livestock in agriculture. Yet animals can be just as important to crops as crops are to animals. Communities can recognize the need for livestock in sustainable agricultural systems, promote it, and still keep concern for animal health and welfare a priority.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- What community economic development efforts have local government undertaken?
- Are they focused on industrial recruitment, homegrown economic development, or both?
- Are residents able to meaningfully participate in local government decisions?
- Do enterprises face unnecessary regulation?
- What services are available to help new businesses learn the ropes?
- What effect do local zoning and building codes have on agriculture? What enterprises and activities do they encourage or discourage?
- What sorts of political coalitions and other groups are active in your community? What are their issues? Do they work together?
- How do local, state, or federal regulations affect farm enterprises, such as roadside stands, game animal farms, and fruit and vegetable processing?
- Do any policies support local growers (such as requirements that schools and other institutions buy local if possible)?
- How do government regulations and policies affect farming practices and decisions?
- Are food processers having difficulty meeting health specifications and keeping their businesses competitive?
- How do property taxes affect agriculture? Are they based on the agricultural value or speculative value of the land?
- Are local government officials responsive to and aware of agricultural conditions and potential?
- What sort of relationship does your local government have with neighboring towns and counties? Do local governments ever work collaboratively?
- What are some issues does your local government share with neighboring counties and towns?

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Infrastructure

Adequate roads, water, sewer, energy services, and communications systems are crucial to local business and residences. Sound and well-maintained infrastructure helps keep businesses in town and attracts new and expanding businesses. But it requires costly maintenance and replacement. Though some parts of a community's infrastructure may be privately owned (for example, electric utilities), much is built and maintained by local governments and districts. Knowing which parts of the infrastructure are most important to existing, expanding, and relocating businesses can help order capital improvements and maintenance priorities.

In expanding towns, an emerging concern is that tax revenues generated by community expansion are often insufficient to pay the costs of the public services (including infrastructure) demanded by it. As a result, existing taxpayers often unwittingly subsidize much community expansion, especially the residential subdivision of unoccupied land. This is because local government spreads the costs of expansion among all taxpayers rather than charging only those who create the costs. This is often, in effect, a subsidy from the whole community to those responsible for the expansion.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- How does the cost and condition of infrastructure affect local enterprise and individuals?
- How do area growers get their products to market?
- What elements of the local infrastructure benefit agriculture most?
- Do all area growers have easy access to necessary utilities?
- What is the condition of your area's infrastructure? Does it change between jurisdiction?
- Is the community trying to attract business that will require the expansion of existing services or facilities? Who will pay for the expansions?
- In the last five years, how has the community invested in its infrastructure? How did local government raise the necessary revenue?
- Should the community borrow money to make and maintain necessary capital improvements?
- What is your town's current infrastructure debt?
- How can municipal workers assist in the design and construction of new infrastructure? If outside expertise is necessary to solve a particular problem, can community residents still be involved?
- What skills are available for infrastructure improvements (construction, masonry, electricians)?
- Does the local electric utility offer energy efficiency programs (night irrigation rates, weatherization, lighting retrofit incentives)?
- Does the local water utility offer efficiency programs?
- Are alternative sources of power available (solar, geothermal, wind, water)?
- Are alternative modes of transportation available (waterways, railroad, public transportation)?

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- What kind of storage facilities are available (warehouses, grain elevators, hay barns)?
- Do you have a rural electric cooperative? How does it serve its members?
- Are there facilities nearby that local groups could use? (piers, grain elevators, airports, underground storage spaces)?
- In what condition is the local building stock?
- Are some facilities available for public use (farmers' markets, greenhouses, exhibition halls, municipal buildings)?
- Does your school system attract families and educators?
- What recreational events or facilities bring people from near and far together?

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Access to Capital

Getting the money you need to develop a product or promote a talent is a matter of finding out where the money is and convincing whoever has it that your project is workable and worthwhile. There are many sources of capital — banks, foundations, and loan funds to name a few. There are also many ways you can create your own funding mechanism to direct local dollars to specific projects. In any case, educating the funder about your work, educating yourself about the lender's interests, and being specific about how you will use the money and what benefits will result are practical steps of getting capital and enterprise together.

Farming, with its seasonal financial needs, is an enterprise for which access to capital is a constant issue. In addition, agriculture's trend toward larger, capital-intensive farming operations has saddled many U.S. farmers with enormous debt. Agriculture's reliance on outside capital has three side-effects for rural communities: major lenders favor large-scale industrial farming operations, leaving smaller farmers with fewer capital avenues; strict bureaucratic loan terms often leave troubled farmers with no other option than the auction block, creating conditions favorable for wholesale corporate buy-outs and land ownership concentration; interest payments made by local farmers to outside financiers leave the local community forever.

In 1986, U.S. farmers paid a total of $17 billion in interest payments. That's an average of $7,655 per farm. If a rural county has, say, 1,800 farms, then farmers in that county spent nearly $14 million in interest payments in 1986. Most of that money went to corporations in distant cities rather than being reinvested by a local bank in local enterprise. Farming communities must find ways to plug the leakage of capital, support local lenders, and create innovative funding mechanisms that address agriculture's needs and encourage new enterprise.

Look for your community's capital leverage points. Consider where local capital comes from, where it goes, and why.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- Where do most people in the community bank? Where do most residents deposit their savings?
- In what other financial instruments do local people invest their money (pension funds, insurance policies, stocks and bonds)?
- Where does local money invested in pension funds and insurance premiums go? Are the funds re-lent by the institutions that hold them?
- What incentives do local banks offer (free checking, community reinvestment accounts)?
- How convenient are existing financial institutions?
- What are the financial needs of local businesses?
- What types of business loans are available in your community? Who gets them?
- What loan terms, rates, and requirements are common?
- Do lenders offer loans with principal balloon payments? Will lenders restructure loans for borrowers whose financial situations change?
- Do local banks lend locally?
- Are lenders and funders willing to work on unconventional or small projects?
- How do local borrowers present their loan proposals?

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- How could loans be structured to suit agriculture's special needs?
- Is capital available for business start-ups? Could these sources be used for establishing new farm enterprises (on-farm food processing, U-pick operations)?
- What institutions provide capital (churches, schools)?
- Is capital available through state or regional programs?
- Does your state have agricultural loan or bond programs?
- Think about the checks you write regularly. How many of them go out of town?
- Who owns local financial institutions?
- Is there a local credit union? How do members benefit?
- Are there any local producer, consumer, or marketing cooperatives?
- Do local banks comply with the federal Community Reinvestment Act?
- Have agricultural price support programs affected land and loan collateral values?
- What other sources of capital exist? What are their requirements (community loan funds, non-profit foundations)?
- Have any local banks failed in the past eight years? Why?
- What is your community's total agricultural debt? Where are the loans held?
- Do agricultural cooperatives in your area have loan funds for their members?
- What types of barter trade take place in your town? How does it help small enterprises?
- How have tax and support policies affected agricultural and community investment decisions. What, if any, investments have been deferred or abandoned?
- Does your community, county, or state offer tax breaks for new agricultural businesses?

Note: You'll probably identify many assets, problems and needs that are not reflected in these questions.

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Markets

Farm crops and livestock provide the raw materials for everything from tomato sauce and frozen dinners to clothing and paper. In the long chain of enterprises involved in food production, processing, and marketing, farms are the first link. Beef cattle, for instance, travel from farms and ranches to feedlots and livestock marketing points and then on to meat packers and processors, retailers, and food service operations. According to Colorado cattleman Dallas Horton, however, a retailer invests about $10 and 48 hours into a meat product, whereas a rancher has spent approximately $2,500 and 16 months raising the same steer. The farmer sold the steer for 65 cents per pound, and the grocer might sell it for $1.50 per pound. The meat has a higher retail price because of the value it has gathered through various stages of processing and packaging. Agricultural producers can add this value to their products themselves with on-farm processing and by marketing farm products directly to restaurants and grocers.

Value-added food production is one way to tap into the world of agricultural markets. Other avenues include growing high-value, specialty crops; producing and marketing products cooperatively; finding new market niches for unique farm products; and creating new market opportunities like farmers' markets. The products of local land and labor are laden with opportunity. Communities that help farmers take advantage of such opportunities gain income from new and improved farm enterprises. Towns also benefit from the new economic activity that supports existing businesses. As a community's income increases and its expenditures decrease, it gains wealth and options for the future.

Follow market chains of production, consumption, and recycling and think of how demand and supply affect them. If you were a farmer, product designer, advertiser, or consumer, what opportunities would you see in this chain?

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- Are there any local bulk food purchasers or food wholesalers?
- Are there any local brokers for farm products?
- Would local grocers be willing to buy fresh produce from farmers?
- Where does the school district buy food? Do area schools grow any of their own food?
- What crops and livestock do local farmers produce?
- Where do local growers market their crops and livestock (farmers' markets, restaurants, commodity markets)?
- When are different crops in season?
- Does anyone focus on specialty crops or exotic livestock?
- Are there any bulk food purchasers or brokers in your area?
- What processed products are made in your community?
- Is there a local feedlot, slaughterhouse, or smokehouse? How far away is it?
- Where do local stores obtain the food they sell?
- Are there any grower-processor cooperatives?
- How many businesses in your community (bakeries, bottlers, food wholesalers, individuals) sell products to local hospitals, schools, nursing homes?
- How many restaurants purchase food locally?

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- What crops did area farmers grow years ago?
- What methods could growers use to extend the season or diversify local production (greenhouses, aquaculture)?
- Do any local enterprises generate waste products that could be used as an input by farmers (feedlot manure for fertilizer, newspapers for animal bedding)?
- What tourist opportunities exist on area farms (fishing, hiking, festivals)? Could these be incorporated into the farm's production needs (U-pick operations, kennels)?
- Where do you buy food? Why do you buy it there?
- How does price and quality differ between locally grown and imported groceries?
- Do you or your neighbors harvest some of your own food? Do you preserve it? Why?
- What new product or production methods have been tried that have failed? Why?

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Informal Economy

The informal economy consists of all activities that exchange or collect goods and services without the use of money. Its foundation is subsistence activities—those that meet basic needs without being accounted on a ledger, such as hunting, fishing, gathering, gardening, clothes-making, home-building, carpooling, even solar heating. Barter—trading goods and services—is another important part of the informal economy in many communities. (The informal economy shouldn't be confused with the illegal economy, which involves illicit products and services, and the underground economy, which involves legal transactions that are illegally withheld from tax authorities.)

Informal commerce plays a far greater role in the local economy than is often thought. One researcher surveyed informal economic activities in Crown Point, New York, a town of 1,900 people. All told, the informal economy was economically equivalent to 100 jobs—a portion of the community's overall economy far too large to be ignored. Whether it's working on someone's car in exchange for them doing your taxes or trading beef for vegetables, the informal economy is an important part of many people's lives. It's especially prevalent in communities where residents have a history of working together.

The informal economy is sometimes erroneously identified with low-income people. In fact, it reduces the income needs of many middle-income people who, for instance, collect their own firewood or grow their own food. Even sharing vacation cabins is part of the informal economy.

In many cases, the informal economy builds self-worth, preserves culture, brings families together, reduces transportation requirements, reduces paperwork, augments retirement income, complements seasonal or intermittent employment, or takes up the slack when someone loses a living-wage job and finds only low-paying jobs.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- Is informal economic activity declining or increasing? Why?
- What products and services are traded or bartered in the community?
- What might be done to make informal economic activities easier?
- Are informal economic activities causing the unsustainable use of any local resources?
- Identify any barriers to informal economic activity (for example, rules or ownership).
- In what ways can unemployed people more fully participate in the informal economy?
- Are there residents operating in the informal economy who would like to start their own businesses in the formal economy?
- If so, what barriers do they face?
- Do informal economic activities affect local businesses?
- Are there ways in which local resources were once used, but are no longer being used, for the informal economy? Could these be tried again?
- What educational opportunities are present in the community? Are they being used to help the informal economy?
- Is there any potential for people involved in informal economic activities to buy or trade cooperatively?
- Does the community encourage or discourage informal economic activities?

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Quality of Life

High quality of life makes a community a great place to live and do business. It attracts new residents, businesses, and possibly tourists. Cultural assets, strong traditions, safety, and clean air and water help sustain a healthy economy. Protecting natural assets and agricultural land, supporting the arts, and preserving historic buildings, for instance, will help maintain the economic and aesthetic vitality of the community. The things that make you feel good about living in this community will also attract new residents.

Use the following questions to help you fill out your worksheet, though not all will apply to your community. Don't fill out the worksheet with answers to the questions. Rather, use them to stimulate your thinking about assets, problems and needs.

- What educational opportunities are present in the community? Are they being used to help business and farmers?
- List artistic and cultural assets in the community. What facilities, traditions, landmarks, or activities are noteworthy?
- What is the effect of the arts on the local economy?
- Is our community a good place to raise children?
- How does safety in this community compare with other areas? What would make it less safe?
- Given current trends, do you foresee quality of life improving or diminishing for your children?
- How does the community's cost of living compare to the average for the state or the nation?
- What recreational opportunities are unique or unusual?
- What community assets keep businesses in town?
- What community assets attract tourists?
- What special amenities or assets might encourage new businesses?
- What amenities do residents want?
- Does the community have special cultural events or recreational facilities?
- Will improving local quality of life damage local agriculure or other business? Vice versa?
- Do the community's traditions tend to improve or damage the quality of life?
- How would you describe the community's way of life?
- What local characteristics detract from the quality of life?
- Will plans and proposals under consideration detract from the quality of life?

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Local Agriculture in the Global Economy

Aisles and aisles of food on grocery store shelves are facts of life in the United States. Our nationwide system of farms, processors, shippers, and supermarkets provides a steady supply of food. Fresh, ready-made, or frozen, favorites are waiting for the city consumer at a nearby grocer 24 hours a day. The convenient abundance of the US food system is a fantastic accomplishment. With abundant land and natural resources, favorable climates, skilled farmers, and advanced technology, this country is a bountiful breadbasket for itself and much of the world.

The price we pay for convenient abundance, however, is greater than the check-out-lane total. Struggling rural towns and farmers, and declining quality of water, soil, and food are costs we pay down the line. Farm foreclosures, topsoil depletion, energy-intensive packaging and processing, coast-to-coast shipping of basic foodstuffs, trade wars, and toxic dangers to farm workers and consumers are significant costs of modern food production. If you peel away its label, the US food system is an expensive product.

These costs of agricultural production have increased along with our push for more larger and more predictable yields to feed into a conveyor-belt food system. Mass-produced food requires preservatives, packaging, expensive machinery, chemical management, farmland, and water. Industrial agriculture has taken up local resources and grown farther and farther away from the family farm. Fewer and fewer food dollars make it back to food producers. In 1987, for instance, U.S. consumers spent $380 billion for food produced on US farms.[1] However, only $90 billion of that returned to American farmers.[2] The rest of the profits went to the packaging, processing, and retail food industries.

Are there other options for farmers and their rural communities? Many across the country are taking stock of their resources and finding that there are indeed ways to earn income from agriculture without wasting topsoil or bankrupting families. Diversified farming operations, investment in the natural productivity of the land, community gardens, and greater local consumption and processing of local foods are among the strategies rural towns are using to supply themselves with fresh food and keep profits home.

Most small town agriculture is not set up to compete with the conveyor-belt food system of global industrial agriculture. Farmers can, however, adapt their operations to suit changing economic and ecological conditions. As communities strengthen local agriculture, they become less dependent on imported food and farmers are more able to withstand the pressures of industrial agriculture.

Global industrial agriculture, with its cost advantages of size and mechanization, has squeezed out thousands of farmers from rural communities. Trying to match the scale of corporate farms, many family farmers have accumulated large debts that have forced them to abandon their operations. Along with those farmers went local newspaper readers, restaurant patrons, retail customers, and school children.

The loss of 50 dairy farms in an average rural area translates into a $2.3 million reduction in farm supply sales, a $600,000 drop in farm equipment sales, $2 million worth of loan defaults at local banks, and the migration of 80 children and seven teachers from local schools.[3] That adds up to an economic loss of more than $6 million per year.[4] Keeping farmers farming is crucial for agriculture-based communities. To avoid losing income and residents, towns must find ways to cut farmers' production costs, substitute local products for imported items, add value to existing products, and develop new markets for local producers.

Income and Resources

Topsoil erosion is one example of how declining resources create unnecessary costs for farmers across the country and deplete the land's fertility. Soil conservation is a simple way farmers can preserve soil fertility and lessen their need for additives like herbicides and synthetic fertilizer. For instance, in the Palouse River Basin, which spans the states of Washington and Idaho, farmers and county governments could reduce expenses through conservation. Reliance on row crops grown on the same land every year and ever larger farms tilled by one operator are trends that are washing away the area's fertile soil.

For every bushel of wheat harvested on the Palouse River Basin, at least one bushel of topsoil flows into road ditches, streams, and the Snake River." [5] The annual cost to the federal government for dredging dams in the region approaches $27 million.[6] Whitman County, Idaho, alone spends between $500,000 and $1.6 million annually to clean sediment from ditches.[7] That is roughly $1 million lost from the county's annual budget that could otherwise return to taxpayers or fund such projects as road and bridge repair, improved social services, or small business loan programs.

To keep up with heavy soil and nutrient losses, Palouse farmers must add manufactured fertilizers and herbicides to their crops. These synthetic inputs are usually made by distant companies. Thus soil erosion causes multiple losses in Palouse communities: county funds go to clean-up; individual farms spend money outside of town to replace lost soil nutrients; and lower net profits, reduced by higher costs of production, drain dollars from farm budgets.

Industrial food production and distribution practices also drain household and business income from a town's economy. The average molecule of processed food in the United States travels 1,300 miles before being eaten.[8] Moving that food costs about $21 billion annually, or $344 per family.[9] For regions that export the same types of food that they import, the price is higher. The agriculture state of Nebraska imports fifty percent, or $777 million worth, of food annually.[10] It pays to import the same vegetables that are actually produced in the state, as well as the cost of treating, packaging, and shipping that food.

When producers sell to area groceries, restaurants, and individuals, income and the value of local production stays home. More money in local pockets and banks means more investment and economic options for local enterprise. Verdigre, Nebraska, a rural farming community with a population of 650 and an annual income of $5 million, spends approximately 15 percent, or $750,000, of its income on processed food.[11] Saving just ten percent of that food bill by buying locally would increase the town's disposable income by $75,000. That is a lot of economic activity for a town of 650. If the saved dollars change hands at local shops and banks, they multiply again in value for the town. One dollar saved is several dollars earned for towns with a variety of local goods and services.

Local Opportunities

Locally based food supplies do not happen overnight. Farmers need help creating and serving new markets. To do this, communities can consider two things. First, current food markets are structured to take agricultural products away for processing and then send them back into the local area for sale at stores. Second, the market for standard food products is already full of producers. Alternatives for the survival of small town agriculture include encouraging and supporting area purchasers to buy local, process food locally, and switch farm production to special products such as high-value crops.

The Northern Ohio Food Terminal is the distribution point for much of the food sold in that area. A recent study showed that six of thirteen commission houses there market only out-of-state strawberries, tomatoes, and broccoli even though those same commodities are grown in Northern Ohio's Lorain

County.[12] To develop markets for local products, students at Ohio's Oberlin College are working with the college's administration to require dining services to buy only locally grown produce. The state is helping the effort by working on a label for all Ohio produce to differentiate it from imported produce and make it easier for the college and other institutions to make good on their promises to buy local. Meeting purchaser needs and developing appropriate incentives are ways community groups can build local markets.

New Markets

New markets are another source of opportunity for local agriculture. By offering unusual products, food producers can make their own markets or tap into market niches that larger, less flexible producers cannot satisfy. For instance, many farmers have changed their methods to reap the benefits of the consumer demand for safe, nutritious organic products. In contrast, many standard crops are genetically engineered and chemically treated to withstand days, sometimes weeks, of shipping and handling. Farmers who have switched from using herbicides, pesticides, and antibiotics to raise their crops and livestock are cutting costs in addition to restoring the natural quality of their land and stock. The demand for natural food products is high. In a 1989 Harris Poll, 84 percent of those consumers surveyed said they would rather buy organically grown fruits and vegetables.[13]

Market niches and on-farm processing offer agricultural producers further choices for earning their income. Many farmers are raising fish, game birds, such specialty crops as shiitake mushrooms, and out-of-season vegetables in greenhouses. Still others are preserving jam on the farm and selling homemade cider.

Homegrown Economic Strength

Communities across the country have started successful homemade agricultural revivals by finding ways to retain agricultural income, substitute local goods for imported products, and develop markets for local production. In Nashville, Tennessee, one group convinced area churches to allow farmers to sell fruits and vegetables on church parking lots one day each week. Circulating from one neighborhood to the next, these infant farmers' markets grew into the citywide Nashville Farmers' Markets. Other communities have started municipal leaf and sewage composting programs that generate affordable, natural fertilizer for farmers. Still others have set up information sharing and small loan programs for new farm enterprises.

Farming communities cannot become more self-reliant by continuing to compete with a global industrial food system. They have to farm differently, offer new products for sale, and put local resources to innovative use. Rural towns are home to generations, traditions, wildlife, and new ideas. They have diverse characters and do not belong on the assembly line. If small town residents want to maintain their agricultural economies, they must lessen their dependence on outside factors.

Just as household vegetable gardens help keep a family's budget options open, self-reliant communities have the capacity to provide for themselves and trade with other communities. The more self-reliant a town becomes, the more the value of local land and labor stays in the community. With these greater assets, small towns develop strength and a wealth of options.

Endnotes

[1] National Research Council, *Alternative Agriculture* (Washington DC, National Academy Press, 1989) p. 35.

[2] Ibid.

[3] Wisconsin Farmland Conservancy, Box 353, Menomonie WI, 54751.

[4] Ibid.

[5] Steve Thompson, "Paying the Price for Erosion", *Idahonian Daily News*, Weekend, June 3 & 4, 1989.

[6] Ibid.

[7] Op Cit.

[8] *1982 Handbook of Agricultural Charts*, USDA, p. 34.

[9] *Empty Breadbasket? The Coming Challenge to America's Food Supply and What We Can Do About It, 1984 Summary Report*, The Cornucopia Project of Rodale Press, p.5.

[10] Steve Burdic, Charles Francis, Doug Simon, *Nebraska Energy Efficient Food Marketing Guidebook to Alternative Crops Production, Processing, Marketing,* Nebraska Energy Office, Small Farm Action Group, Inc., February, 1987.

[11] Comments of Skip Laitner, Chief, Research Division, Nebraska Energy Office, to the Midwest Recycling Coalition, Fifth Annual Meeting, 23 October 1986, Omaha, Nebraska.

[12] Barbara Drake and Randall James, *Marketing of Select Fresh Agricultural Products in the Cleveland, Ohio, Metropolitan Area* November, 1987, p.8.

[13] "America Wants Organic: Organic Gardening Exclusive Harris Poll," 20 March 1989 (Louis Harris and Associates, Inc.; nationwide survey based on 1,250 telephone interviews between 9 and 23 November 1988; sampling error is plus or minus 3 percentage points)

Local Agricultural Success Stories

There are plenty of great ideas for strengthening a community and its economy, but it seems there's so little time to find them. This brief paper summarizes nineteen success stories for you to consider. After reading each one, think about how it might apply to your area. Your version will likely be quite different. For instance, a regional program described here might work locally in your area; a project that worked for one commodity elsewhere might be used locally on your area's commodities. Not every idea described here will fit your situation, but one or two just might be the thing that starts you on the path of developing your own success story.

In Support of Agriculture

Getting seeds in the ground and harvesting mature crops are what farmers do best. They can do these things better when there is some way of spreading out the burdens of start-up costs and the risks inherent to a business that relies on the weather. Community Supported Agriculture (CSA) is one way growers can finance their operations and consumers can guarantee themselves a season's supply of fresh, organic produce. By selling shares to a percentage of a season's produce, CSA farms generate the up-front capital they need for planting, while securing a market for their future fruits and vegetables. Shareholders receive a regular supply of the produce, which is sorted and packed at the farm.

Consumers Invest in Farmers

Money flows in and out of our hands as income and expenditures drive our personal budgets. Agriculture budgets are among those influenced by the seasons, with winter being the time when heating bills are high and the corn crib empty. On even the tightest budget, some farmers have to borrow expensive money from banks to make it through the winter months. To help, two roadside farmstand owners and the Self-Help Association for a Regional Economy (SHARE) in Great Barrington, Massachusetts, initiated in 1989 a program that gets cash to the farmers' budgets in the winter and gives consumers discounts on produce in the summer. The Berkshire Farm Preserve Note sells for nine dollars in the fall and is redeemed by consumers in the summer for $10 worth of fresh fruits and vegetables.

The notes are a market-based community farm loan program. They are also a way for nearby consumers to vote for a supply of locally-grown and processed food products.

Exotic Farm Life

Just as bread is a food staple, so corn and beans are staple crops for the midwestern farm. Given a choice, however, most people would eat bread with a variety of other foods, they'd add spices and other ingredients to their beans. Likewise, an increasing number of traditional farmers are developing a taste for variety in their production. For example, Shiitake mushrooms, domesticated deer, dried flowers, and ostrich eggs are profit-making strangers that are making themselves more and more at home on the nation's farms. Growers have noted the fact that the United States imports ten times the amount of herbs and spices it exports and that ethnic populations in the country send away for ingredients they need. Switching from row crops to high value crops and exotic livestock is a valuable financial recipe for many growers and a path to local economic diversity.

Building Bridges

Beginning about twenty years ago, conservative Snowflake, Arizona, like many communities, began to see different kinds of farmers—small scale, sometimes organic, who were refugees from city life—people who tended to be environmentalists and said they wanted to "get back to the land." Many gave

up after a small time and a big dose of reality, but many others stayed.

Oldtimers didn't much talk to the newcomers, just thought of them as hippies. But in 1995, Snowflake used the Economic Renewal process and, much to everyone's surprise, oldtimers and new farmers began to share ideas about their respective practices and even to share equipment. Together, they began a successful shift to sweet corn production and even talked the local supermarket into stocking it.

These new relationships didn't suddenly save Snowflake's economy. But they, along with several other practical economic development projects—a farmer's market, a business mentoring program, and a tourism effort— headed the community down a far more positive road.

Irrigating after Dark

Ten North Dakota farmers are saving money by irrigating their cropland at night. With 17 irrigation systems between them, their combined energy demand is quite a load for the local utility. Before switching to nighttime irrigation, they paid a hefty daytime demand surcharge for their intense use of the grid. In 1986, however, the James Valley Electric Cooperative decided to offer the farmers a straight nighttime rate of 3.5 cents per kilowatt hour. By irrigating between 9:30 p.m. and 7:30 a.m., the farmers avoid the demand surcharge and use even less energy and water because night irrigation results in less evaporation of water sprayed. One farmer in the program estimated that he has cut his irrigation bill by 45 percent over previous years.

Improvements in resource efficiency are low risk, high yield investments that *plug leaks* in farms, homes, businesses, and local economies.

Cutting Down on Feed Costs

Resource efficiency is particularly relevant at the sale barn where ranchers must sell their animals for enough money to pay their costs and still make a profit. Cutting down on feed grain and hay is one way to fatten up net profit. But how can it be done without raising a skinny steer? Rotational grazing is one way farmers across the country are becoming more resource efficient and self-sufficient and in livestock production. Based on practices of New Zealand dairy farmers, rotational grazing systems manage farmland grasses and livestock feeding such that farms and ranches develop the capacity to raise cattle on the farm's own forage.

Luane Schroeder raises some 50-head of cattle on her 130-acre Ledgerock Farm in Newton County, Arkansas, with a rotational grazing arrangement that reduces feed costs and limits veterinarian visits. As she moves her cattle from one 1-1/2 acre plot to the next, they serve as a combination "mower, baler, bushhog, composter, fertilizer spreader, and no-till planter." The cows harvest the best of the grass in each area, leaving the immature forage to grow and plenty of nutrients in the form of partially composted manure and liquid nitrogen behind to help it along. Movable electric fences allow Schroeder to turn her cattle easily from one grazing area to the next. She does this on a 24-hour basis, which limits the amount of stomping on each plot, keeps pest populations on the run, and saves the remaining forage until the cattle return. In the winter, the cattle feed on thirty acres of hay that has been left standing for the harsher season. The rest of the farm is left alone to build up nutrients for spring.

"Good Day from Trenton, Missouri!"

"We market everything to the world." That's how Ellen Dolan describes how she and Joy Jackson run the American Trade Exchange, Inc. (AMTEX). The business takes cottage industry products of the midwestern US to buyers around the world. Dolan and Jackson have sold oat bran to Wal Mart, popcorn to the United Emirates,

ginseng to South Korea, taco sauce to Saudi Arabia, and charcoal to Japan. This was not always the case, however. In 1986, when the farm crisis forced the Dolan's to buy their own home at a foreclosure auction, AMTEX was just an office on Main Street that the Dolans and their partners had rented to start a marketing business. Being the only "unemployed" spouse, Ellen Dolan was drafted to get the business up and running while the others worked other jobs. Now, she and Joy Jackson run the tiny but feisty marketing firm that supplies international and domestic market niches with high-quality products from small businesses. By *supporting existing businesses*, these two homemakers have added "entrepreneur" to their job descriptions and new sources of income to the people who work with them. Their letters to buyers around the globe begin with, "Good Day from Trenton, Missouri," and this simple message gets big results.

Homemade Equipment Turns a Profit

If available equipment doesn't suit the field work, farmers have been known to rig new hardware to better fit their farming practice. And if one farmer develops a more appropriate tool, it's likely that another wishes the improvement were available. That's what Vincent Kramper of Dakota City, Nebraska, found out when he invented his Soybean Topper — a 10-foot wide weed clipper attached to a 3-point hitch that chops off volunteer corn and tall weeds above the beans and does away with the need to use chemical herbicides. In 1984, Kramper invested $500 in his first topper. Now he sells them for $1,100 each. Read about other farm machine innovations in *New Farm* magazine.

Knocking on a Small Town's Door

Good water and sewer systems do not have much value on unused property. Likewise, the town of Fruitland, Idaho, did not see much opportunity in the extensive infrastructure of a small parcel of land it had incorporated in the 1970's. When the town started thinking about renewed economic activity, however, it realized the vacant land was actually an incentive it could use to bring new enterprise to the area.

In 1985, Fruitland decided to market this attractive infrastructure addition of extensive water and sewage facilities. A canning factory, a frozen food plant, two trucking terminals, an emergency care facility, and a cherry processing facility liked what they found and settled in town. The vacant land's facilities plus Fruitland's excellent school system were incentives enough for several companies to come knocking on Fruitland's door. Without having to offer tax abatements or other inducements, Fruitland gained the full benefits of *compatible business recruitment.*

Larger-Scale Efforts

A Town and its Teachers

When local residents and students pool their efforts for community projects, it benefits everyone. The Agricultural Revitalization Program at Iowa's Southwestern Community College is a case in point. In 1985—when the community college started looking for ways to help the ailing farm economy—local bankers, farmers, implement dealers, and others put their heads together to help focus the college on *supporting existing businesses.* The Agricultural Revitalization Program is the result of their efforts to find new and reliable markets for local producers. Using the combined resources of college and community, this program surveys farmers' on their production interests, teaches practical business decision-making skills, develops new markets, and monitors the progress of each venture. Among the successful projects generated by the program and its participants are expanded markets for

alfalfa hay, a hay cooperative, and contracts for feeder pig production.

Finding the Farm's Finest

The Best of Missouri Farms, a direct marketing mail-order catalog, features the products and stories of Missouri farm families in its pages. You can order sun-ripened fruit, natural herbs and spices, gourmet popcorn, live fowl, barbecue sauce, country cured hams, goat-milk soaps, beeswax candles, and many more homemade Missouri items from the annual publication, produced by the University of Missouri-Columbia. The farm crisis of the mid-1980s prompted the university's extension and agriculture departments to develop the catalog as a tool for Missouri's small farmers to sell their specialty products directly to consumers. Almost 80 percent of Missouri farms are classified as small, with less than $40,000 in annual sales. The Best of Missouri Farms catalog is a state and university promotion effort that has successfully opened new doors for many of Missouri's hometown enterprises.

Taking the Market to Town

Local agricultural producers stand to gain big if they can coordinate their efforts to supply nearby metropolitan areas with fresh food. In Alabama, the state department of agriculture and industries took an active role in creating facilities for its farmers to tap into the $20 million Montgomery food market.

With 28 acres of donated land and state loans and grants, the agency built the Montgomery State Farmers' Market. Convenient for both farmers and consumers, the market is open year-round and can accommodate most any seller. The facility has a truckers' shed, which allows trucks of any size to back into spaces and sell produce directly from the vehicle; a retail building, which houses long-term vendors under the market roof; and a wholesale building, which operates much like a terminal market, where brokers and farmers contract for large quantities of produce. In addition to stretching the metropolitan consumer's food dollar and providing a viable agriculture alternative for farmers at the market, Alabama has included an agriculture education program that gives stipends to farmers willing to try new practices and crops that show profit potential for small farmers. Other farmers can tour these test farms and learn about crop and cultivation alternatives. This, along with consumer outreach programs, indicates Alabama's commitment to keeping agriculture and communities alive and well.

Lending Where Credit is Due

Getting enough money together to fund new ventures is a task that revolving loan funds across the country are accomplishing with winning style. Their lending targets particular activities such as affordable housing, rural enterprise, and resource conservation. Revolving loan funds make capital available to community development efforts. Those who lend money to revolving loan funds — churches, individuals, foundations, and others — do so because they want to see their money go directly to locally based projects. Initial loans from RLFs help initiatives get started and build credit histories that leverage bank support down the line. Revolving loan funds can package loans that accommodate the needs of borrowers while maintaining lending standards that insure the security and return of the money to the funds' lenders. Like any financial institution, loan funds pay interest to lenders and maintain reserves to cover any potential losses. When borrowers repay their loans, the money goes back into the fund and is re-lent to other small businesses and community renewal ventures.

In 1987, the Ozark Organic Growers Association began developing projects to promote small farm viability in Arkansas, Missouri, and Oklahoma. Financing Ozark Rural Growth (FORGE) is one result of their efforts.

This community loan fund makes loans to organic growers and related businesses. In 1988, the Bank of Fayetteville, Arkansas, agreed to serve as FORGE's host institution. The bank provides accounting services for the FORGE savings and credit fund accounts, while a FORGE review committee actually makes the loans. Borrowers include Full Circle Farm, with a $5,000 loan to build an ice machine and hydro-cooler; Heart of the Mountain Farm, with a loan to purchase an irrigation system; and the Ozark Organic Growers Association, with a loan to buy a semi-truck for hauling members' produce to market.

A Dash of Value Adds to Profits

The Minnesota Corn Processors cooperative is in the business of wet-milling its members' locally grown corn into a variety of high-quality products. For years, the farmers had been losing money on their corn. The high cost of transporting corn to distant markets ate up their profits. Then, such corn products as syrup and gluten meal were shipped back to stores in Minnesota where the farmers had to pay again for their processed corn as consumers. Instead of facing this market situation alone, several farmers started working on ways to add value to local crops before they're shipped. The farmers formed a cooperative and raised money to build a plant to process local grain into syrups, oils, and meal. Minnesota Corn Processors, headquartered in Marshall, Minnesota, continues to thrive today.

Working on the Railroad

When the bridge goes out, everyone is stranded. In the case of rural communities near Dawson, Minnesota, the problem was a 36-mile "abandoned" branch railroad line. In 1980, farmers could only ship their grain by rail one or two days of the week at a snail's pace of three to four miles per hour. Not only did this situation threaten the farmers, who needed reliable railroad service for hauling hopper car loads of their crops to the Pacific Northwest, but it practically shut off business for a large soybean processing plant and several grain elevators and fertilizer plants in the area.

To fix this infrastructure problem, farmers and other shippers in a five-county area of southwestern Minnesota formed AgriRail Inc., to buy, repair, and manage the branch line. With grants and loans from local interests and a five million dollar, interest-free loan from the Minnesota Department of Transportation, AgriRail managed within 1 1/2 years to upgrade the track to Class #1 service with two 54-car loading stations and 50 mph service two to three times per week. With this necessary link to the nation's rail network, the southwestern Minnesota agricultural businesses have regained access to the world.

Future Farmland

Increasingly in the United States, farmland is being converted to non-farm uses or concentrated in large farm/corporate ownership. Paved land can't grow food and absentee ownership packs profits off to other places. To keep farmers farming, various groups have initiated projects to preserve farmland in the community and, with it, the diversity of the local population, food supply, and economic base. The Wisconsin Farmland Conservancy organizes community land trusts (CLT's) in rural communities to buy and hold farmland in trusts that preserve its use for future local farming generations while allowing individual farmers to own their buildings, equipment, and farming enterprises. In the case of a third-generation dairy farmer, who in 1988 faced foreclosure by the Farm Credit Service, the Wisconsin Farmland Conservancy was able to buy the land and keep the farm family on it with a lifetime lease. As a CLT, the farm is operated under two easements. One easement removes non-agricultural development rights, requiring the farm

to remain active. The second easement lays out broadly accepted land stewardship and soil conservation practices to keep the land in good condition. The Wisconsin Farmland Conservancy works to finance and organize CLTs in the state, which allow beginning and low-equity family farmers to share resources and strengthen their communities.

Bringing Grassroots Experts Together

A little information can go a long way when you're trying to make a decision. But expert advice is costly, and practical ideas are often scattered among local residents who may not have occasion to speak to one another. Gathering local knowledge and making it available and affordable is a challenge that faces any community trying to pool its human resources. Here's how two groups brought hundreds of people and skills together:

In 1983, Washington State University Cooperative Extension agent Mike Hackett decided to revise Extension's successful Master Gardener Program to help livestock producers in the Puget Sound and Northwest Washington area. In exchange for in-depth training about livestock production, participants in the Livestock Master Program volunteer for up to 80 hours of service helping local farmers with livestock questions. Ninety-five percent of the trainees are themselves farmers who then make themselves available to their neighbors. Livestock masters are trained to handle an array of questions, from general livestock biology to land use practices. This program provides informed advice at no cost to small and part-time farmers and creates a network of farmers that can work and consult together.

Many farmers are switching to sustainable farming practices to conserve their soil and become less dependent on expensive chemical inputs. To help farmers in the Northern Rockies and Plains keep up with changes in this field, Montana's Alternative Energy Resources Organization (AERO), the Montana Farmers' Union, and the Northern Plains Resources Council joined together to create AERO's *Guide to Sustainable Agriculture in the Plains.* With $100,000 worth of grants and other support, the groups surveyed 188 farmers in seven US states and two Canadian provinces, recorded the data on computer, and distributed over 12,000 directories to farmers and organizations in the region. With names, phone numbers, and reports on specific sustainable agriculture practices, the Guide facilitates on-the-job answers to farmers' questions and, most often, farmer-to-farmer consultation and site visits.

Healthy Food and People

The Massachusetts Farmers' Market Coupon Program is a prime example of how government's social and economic renewal goals can be combined to make the best use of existing resources and satisfy a variety of needs. Concerned with both the health of its citizens and its economy, Massachusetts decided to start a farmers' market coupon program. The program provides state social service agencies with farmers' market coupons to distribute to their clients. When the coupons are redeemed at the farmers' markets, local growers earn income and low-income and elderly residents of the state can afford to buy fresh, nutritious fruits and vegetables. This combined food and farm assistance program directs social service money to the purchase of locally grown produce instead of the imported foodstuffs found on most grocery store shelves.